

ARNOLD & PORTER

202.942.5000 202.942.5999 Fax

555 Twelfth Street, NW Washington, DC 20004-1206

April 9, 2002

j #3

Commissioner for Patents Washington, D.C. 20231

Re:

U.S. Patent Application No. 09/987,899

Filed: November 16, 2001

For Nuclois Asid

Nucleic Acid Mólecules and Other Molecules Associated with

the Carbon Assimilation Pathway

Inventors: Nordine CHEIKH et al.

Our Ref. No.: 16517.258

Sir:

It is Applicants' belief that copies of the executed Combined Declaration and Power of Attorney for Patent Application documents, as originally filed with this application on November 16, 2001, were inadvertently submitted in incomplete form. Therefore, Applicants enclose replacement copies (16 pages) of the four (4) Combined Declaration and Power of Attorney documents.

The Commissioner is hereby authorized to charge any fee deficiency and/or credit any overpayment, to our Deposit Account No. 50-1824, referencing matter number 16517.258. A duplicate copy of this letter is attached.

Respectfully submitted,

David R. Marsh (Reg. No. 41,408)

Mitan M Vinnola

Milan M. Vinnola (Reg. No. 45,979)

Attachments

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter that is claimed and for which a patent is sought on the invention entitled <u>NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH THE CARBON ASSIMILATION PATHWAY</u>,

the specification of which is filed herewith unless the following box is checked:

X		999 : ation Number <u>09/262,979</u> ; and (if applicable).			
	y state that I have reviewe d by any amendment refe		f the above identified specification, include	ling the cl	laims, as
I ackno	wledge the duty to disclos	se information that is material to	patentability as defined in 37 C.F.R. § 1.	56.	
invento United	r's certificate, or § 365(a) States listed below, and h	of any PCT international applicate also identified below any for	-(d) or § 365(b) of any foreign application ation, which designated at least one count reign application for patent or inventor's oplication on which priority is claimed.	try other t	han the
Prior F	oreign Application(s)			Priority	Claimed
				☐ Yes	☐ No
(Applio	eation No.)	(Country)	(Day/Month/Year Filed)	-	
				Yes	□No
(Applio	cation No.)	(Country)	(Day/Month/Year Filed)		
I hereb	y claim the benefit under	35 U.S.C. § 119(e) of any Unite	d States provisional application(s) listed b	elow.	
60/076 (Applio	912 cation No.)	03/06/98 (Filing Date)	Abandoned (Status)		

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or under § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

Lawrence M. Lavin, Jr. Dennis R. Hoerner, Jr. Richard H. Shear

Jeffrey I. Auerbach, Reg. No. 32,680 Melvin L. Barnes, Jr. Reg. No. 38,375 Michael J. Bell, Reg. No. 39,604 Mark R. Buscher, Reg. No. 35,006 Celine T. Callahan, Reg. No. 34,301 Cono A. Carrano, Reg. No. 39,623 Joseph V. Colaianni, Reg. No. 39,948 James F. Davis, Reg. No. 21,072 Thomas M. Dunham, Reg. No. 39,965 Joel M. Freed, Reg. No. 25,101 Vernon Randall Gard, Reg. No. 33,886 Alan M. Grimaldi, Reg. No. 26,599 Alexander J. Hadjis, Reg. No. 26,599 Alexander J. Hadjis, Reg. No. 25,227 Leslie L. Jacobs, Jr., Reg. No. 40,659

Reg. No. 30,768 Reg. No. 30,914 Reg. No. 26,583

Richard H. Kjeldgaard, Reg. No. 30,186
Joseph P. Lavelle, Reg. No. 31,036
David R. Marsh, Reg. No. 41,408
Joseph A. Micallef, Reg. No. 39,772
Erik B. Milch, Reg. No. 42,887
Anthony D. Miller, Reg. No. 34,394
Karen L. Nicastro, Reg. No. 35,968
Bradley J. Olson, Reg. No. 40,750
Andrew Y. Piatnicia, Reg. No. 40,772
Andrea G. Reister, Reg. No. 36,253
Stephen J. Rosenman, Reg. No. 29,209
Timothy L. Scott, Reg. No. 37,931
Anthony W. Shaw, Reg. No. 30,104
J. David Smith, Reg. No. 39,839
Michael J. Songer, Reg. No. 39,841

Send Correspondence to:

Larry M. Lavin, Jr.

Monsanto Company

700 Chesterfield Parkway North, BB4F

St. Louis, Missouri

Facsimile: (314) 737-6047

Direct Telephone Calls to: 314-737-6670

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that

Appl. No. 09/262,979 Docket No. 38-21(15091)B

such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first invento	tor Nordine Cheikh	
First inventor's signature	Notice Child	5/27/99
Residence	Manchester, Missouri USA	
Citizenship	USA	
Post Office Address	721 Foxwick Drive, Manchester, Missouri 63011	
	· · · · · · · · · · · · · · · · · · ·	
Full name of second inventor	Philip W. Miller	
Second inventor's signature	Date	
Residence	Ballwin, Missouri USA	
Citizenship	USA	
Post Office Address	216 E Seawind Drive, Ballwin, Missouri 63021	
Full name of third inventor	Keith M. O' Connell	
Third inventor's signature	Date	
Residence	Kirkwood, Missouri USA	
Citizenship	USA	
Post Office Address	568 A Fieldmount, Missouri 63122	

Full name of fourth inventor Jingdong Liu		
Fourth inventor's signature		Date
Residence	Ballwin Missouri USA	
Citizenship	USA	
Post Office Address	885 Castle Pines Drive, Ballwin Missouri 63021	
Full name of fifth inventor		
Fifth inventor's signature		Date
Residence		
Citizenship	·	
Post Office Address	<u>-</u>	
Full name of sixth inventor		
Sixth inventor's signature		Date
Residence		
Citizenship		
Post Office Address		

tion and Power of Attorney for Pa



Docket Number: 38-21(15091)B

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter that is claimed and for which a patent is sought on the invention entitled NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH THE CARBON ASSIMILATION PATHWAY,

the specification of which is filed herewith unless the following box is checked:

the specification of	which is thed herewith diffess the following	owing box is encered.		
as United S	n <u>March 4, 1999;</u> States Application Number <u>09/262.979</u> ed on (if applicable)			
•	have reviewed and understand the cor endment referred to above.	ntents of the above identified specification, in	cluding the cla	aims, as
I acknowledge the d	uty to disclose information that is ma	terial to patentability as defined in 37 C.F.R.	§ 1.56.	
inventor's certificate States listed below,	c, or § 365(a) of any PCT internationa and have also identified below any fo a filing date before that of the applicat	119(a)-(d) or § 365(b) of any foreign applic l application, which designated at least one c reign application for patent or inventor's cert ion on which priority is claimed.	ountry other th ificate, or PCT	an the United
			Yes	□No
(Application No.)	(Country)	(Day/Month/Year Filed)		
			☐ Yes	□No
(Application No.)	(Country)	(Day/Month/Year Filed)		
I hereby claim the b	enefit under 35 U.S.C. § 119(e) of an	y United States provisional application(s) list	ed below.	
60/076,912	03/06/98	Abandoned		
(Application No.)	(Filing Date)	(Status)		

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or under § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

Lawrence M. Lavin, Jr. Dennis R. Hoerner, Jr. Richard H. Shear

Jeffrey I. Auerbach, Reg. No. 32,680 Melvin L. Barnes, Jr. Reg. No. 38,375 Michael J. Bell, Reg. No. 39,604 Mark R. Buscher, Reg. No. 35,006 Celine T. Callahan, Reg. No. 34,301 Cono A. Carrano, Reg. No. 39,623 Joseph V. Colaianni, Reg. No. 39,948 James F. Davis, Reg. No. 21,072 Thomas M. Dunham, Reg. No. 39,965 Joel M. Freed, Reg. No. 25,101 Vernon Randall Gard, Reg. No. 33,886 Alan M. Grimaldi, Reg. No. 26,599 Alexander J. Hadjis, Reg. No. 26,599 Alexander J. Hadjis, Reg. No. 25,227 Leslie L. Jacobs, Jr., Reg. No. 40,659

Reg. No. 30,768 Reg. No. 30,914 Reg. No. 26,583

Richard H. Kjeldgaard, Reg. No. 30,186
Joseph P. Lavelle, Reg. No. 31,036
David R. Marsh, Reg. No. 41,408
Joseph A. Micallef, Reg. No. 39,772
Erik B. Milch, Reg. No. 42,887
Anthony D. Miller, Reg. No. 34,394
Karen L. Nicastro, Reg. No. 35,968
Bradley J. Olson, Reg. No. 40,750
Andrew Y. Piatnicia, Reg. No. 40,772
Andrea G. Reister, Reg. No. 36,253
Stephen J. Rosenman, Reg. No. 29,209
Timothy L. Scott, Reg. No. 37,931
Anthony W. Shaw, Reg. No. 30,104
J. David Smith, Reg. No. 39,839
Michael J. Songer, Reg. No. 39,841

Send Correspondence to:

Larry M. Lavin, Jr.

Monsanto Company
700 Chesterfield Parkway North, BB4F
St. Louis, Missouri
Facsimile: (314) 737-6047

Direct Telephone Calls to: 314-737-6670

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and

belief are believed to be true; and furthe these statements were made with the knowle that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

irst inventor's signature	Date
esidence Manchester, Missouri USA	
itizenship USA	
ost Office Address 721 Foxwick Drive, Manchester, Missouri 63011	
Full name of second inventor Philip W. Miller Second inventor's signature	Date . I I
Residence Ballwin, Missouri USA	Date 6/7/99-
NESIGEICE DAIIWIII, MISSOUTI USA	
Citizenship USA	
Post Office Address 267 Oak Pass Court Ballwin, Missouri 63021	and the second s
Full name of third inventor Keith M. O Connell	
Third inventor's signature	Date
Residence Kirkwood, Missouri USA	
Citizenship USA	
Post Office Address	

Full name of fourth inventor	Jingdong Liu	
Fourth inventor's signature		Date
Residence	Ballwin Missouri USA	
Citizenship	USA	
Post Office Address	885 Castle Pines Drive, Ballwin Missouri 63021	
Full name of fifth inventor		
Fifth inventor's signature		Date
Residence		
Citizenship		
Post Office Address		
Full name of sixth inventor		· · · · · · · · · · · · · · · · · · ·
Sixth inventor's signature		Date
Residence		
Citizenship		
Post Office Address		
		

Docket Number: 38-21(15091)B

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter that is claimed and for which a patent is sought on the invention entitled NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH THE CARBON ASSIMILATION PATHWAY

the specification of which is filed herewith unless the following box is checked:

X		h 4, 1999; pplication Number <u>09/262,979</u> ; (if applicable).	and	·	
	y state that I have reed by any amendmen		nts of the above identified specification, in	cluding the cla	nims, as
I ackno	wledge the duty to d	lisclose information that is mater	ial to patentability as defined in 37 C.F.R.	§ 1.56.	
invento States I	r's certificate, or § 3 isted below, and have	65(a) of any PCT international ap-	19(a)-(d) or § 365(b) of any foreign application, which designated at least one content or inventor's certion on which priority is claimed.	ountry other th	an the United
Prior Fo	oreign Application(s)		Priority	Claimed
				☐ Yes	□ No
(Applic	ation No.)	(Country)	(Day/Month/Year Filed)		
				☐ Yes	□ No
(Applic	ation No.)	(Country)	(Day/Month/Year Filed)		
I hereb	y claim the benefit u	nder 35 U.S.C. § 119(e) of any U	Jnited States provisional application(s) list	ed below.	
60/076. (Applic	912 ation No.)	03/06/98 (Filing Date)	Abandoned (Status)		

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or under § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

Lawrence M. Lavin, Jr. Dennis R. Hoerner, Jr. Richard H. Shear

Jeffrey I. Auerbach, Reg. No. 32,680
Melvin L. Barnes, Jr. Reg. No. 38,375
Michael J. Bell, Reg. No. 39,604
Mark R. Buscher, Reg. No. 35,006
Celine T. Callahan, Reg. No. 34,301
Cono A. Carrano, Reg. No. 39,623
Joseph V. Colaianni, Reg. No. 39,948
James F. Davis, Reg. No. 21,072
Thomas M. Dunham, Reg. No. 39,965
Joel M. Freed, Reg. No. 25,101
Vernon Randall Gard, Reg. No. 33,886
Alan M. Grimaldi, Reg. No. 26,599
Alexander J. Hadjis, Reg. No. 36,540
Albert P. Halluin, Reg. No. 25,227
Leslie L. Jacobs, Jr., Reg. No. 40,659

Reg. No. 30,768 Reg. No. 30,914 Reg. No. 26,583

Richard H. Kjeldgaard, Reg. No. 30,186
Joseph P. Lavelle, Reg. No. 31,036
David R. Marsh, Reg. No. 41,408
Joseph A. Micallef, Reg. No. 39,772
Erik B. Milch, Reg. No. 42,887
Anthony D. Miller, Reg. No. 34,394
Karen L. Nicastro, Reg. No. 35,968
Bradley J. Olson, Reg. No. 40,750
Andrew Y. Piatnicia, Reg. No. 40,772
Andrea G. Reister, Reg. No. 36,253
Stephen J. Rosenman, Reg. No. 29,209
Timothy L. Scott, Reg. No. 37,931
Anthony W. Shaw, Reg. No. 30,104
J. David Smith, Reg. No. 39,839
Michael J. Songer, Reg. No. 39,841

Send Correspondence to:

Larry M. Lavin, Jr.

Monsanto Company

700 Chesterfield Parkway North, BB4F

St. Louis, Missouri

Facsimile: (314) 737-6047

Direct Telephone Calls to: 314-737-6670

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

First inventor's signature		Date
Residence	Manchester, Missouri USA	
Citizenship	USA	
Post Office Address	721 Foxwick Drive, Manchester, Missouri 63011	
Full name of second inventor	Philip W. Miller	
Second inventor's signature	·	Date
Residence I	Ballwin, Missouri USA	
Citizenship	JSA	
Post Office Address 2	216 E Seawind Drive, Ballwin, Missouri 63021	
Full name of third inventor Ko	eith M. O'Connell A Connell	Date //.
	cwood, Missouri USA	
Citizenship US	Α	
Post Office Address 56	8 A Fieldmount, Kirkwood, Missouri 63122	

Appl. No. 09/262,979 Docket No. 38-21(15091)B

Full name of fourth inventor Jingdong Liu					
·		·			
Fourth inventor's signatur	e	Date			
Residence	Ballwin Missouri USA				
Citizenship	USA				
Post Office Address	885 Castle Pines Drive, Ballwin Missouri 63021				
		and the second of the second o			
Full name of fifth invent	or				
Fifth inventor's signatur	e	Date .			
Residence					
Citizenship	Citizenship				
Post Office Address					
Full name of sixth inven	tor				
Sixth inventor's signatur	re	Date			
Residence		Miles Ages			
Citizenship					
Post Office Address	Post Office Address				
L					



Combined Declaration and Power of Attorney for Patent Application

Docket Number: <u>38-21(15091)B</u>

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter that is claimed and for which a patent is sought on the invention entitled NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH THE CARBON ASSIMILATION PATHWAY

the specification of which is filed herewith unless the following box is checked:

X	was filed on March 4, 19 as United States Applicat was amended on	ion Number <u>09/262,979</u> ;	and		
	state that I have reviewed d by any amendment refer		nts of the above identified specification, in	cluding the cla	ims, as
I ackno	wledge the duty to disclose	information that is mater	ial to patentability as defined in 37 C.F.R.	§ 1.56.	
inventor States li	sted below, and have also	of any PCT international apidentified below any forei	19(a)-(d) or § 365(b) of any foreign application, which designated at least one congruence of application for patent or inventor's certing on which priority is claimed.	ountry other tha	in the United
Prior Fo	oreign Application(s)			Priority	Claimed
				☐ Yes	□ No
(Applic	ation No.)	(Country)	(Day/Month/Year Filed)		
				☐ Yes	□ No
(Applic	ation No.)	(Country)	(Day/Month/Year Filed)		
I hereby	claim the benefit under 3:	5 U.S.C. § 119(e) of any U	Jnited States provisional application(s) list	ed below.	
60/076. (Applic	912 ation No.)	03/06/98 (Filing Date)	Abandoned (Status)		

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or under § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

Lawrence M. Lavin, Jr. Dennis R. Hoerner, Jr. Richard H. Shear

Jeffrey I. Auerbach, Reg. No. 32,680 Melvin L. Barnes, Jr. Reg. No. 38,375 Michael J. Bell, Reg. No. 39,604 Mark R. Buscher, Reg. No. 35,006 Celine T. Callahan, Reg. No. 34,301 Cono A. Carrano, Reg. No. 39,623 Joseph V. Colaianni, Reg. No. 39,948 James F. Davis, Reg. No. 21,072 Thomas M. Dunham, Reg. No. 39,965 Joel M. Freed, Reg. No. 25,101 Vernon Randall Gard, Reg. No. 33,886 Alan M. Grimaldi, Reg. No. 26,599 Alexander J. Hadjis, Reg. No. 36,540 Albert P. Halluin, Reg. No. 25,227 Leslie L. Jacobs, Jr., Reg. No. 40,659

Reg. No. 30,768 Reg. No. 30,914 Reg. No. 26,583

Richard H. Kjeldgaard, Reg. No. 30,186
Joseph P. Lavelle, Reg. No. 31,036
David R. Marsh, Reg. No. 41,408
Joseph A. Micallef, Reg. No. 39,772
Erik B. Milch, Reg. No. 42,887
Anthony D. Miller, Reg. No. 34,394
Karen L. Nicastro, Reg. No. 35,968
Bradley J. Olson, Reg. No. 40,750
Andrew Y. Piatnicia, Reg. No. 40,772
Andrea G. Reister, Reg. No. 36,253
Stephen J. Rosenman, Reg. No. 29,209
Timothy L. Scott, Reg. No. 37,931
Anthony W. Shaw, Reg. No. 30,104
J. David Smith, Reg. No. 39,839
Michael J. Songer, Reg. No. 39,841

Send Correspondence to:

Larry M. Lavin, Jr.

Monsanto Company

700 Chesterfield Parkway North, BB4F

St. Louis, Missouri

Facsimile: (314) 737-6047

Direct Telephone Calls to: 314-737-6670

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Nordine Cheikh	
First inventor's signature	Date
Residence Manchester, Missouri USA	
Citizenship USA	
Post Office Address 721 Foxwick Drive, Manchester, Missouri 63011	
Full name of second inventor Philip W. Miller	
Second inventor's signature	Date
Residence Ballwin, Missouri USA	
Citizenship USA	
Post Office Address 216 E Seawind Drive, Ballwin, Missouri 63021	
Full name of third inventor Keith M. O'Connell	
Third inventor's signature	Date
Residence Kirkwood, Missouri USA	
Citizenship USA	
Post Office Address 568 A Fieldmount, Kirkwood, Missouri 63122	

Full name of fourth inventor Jingdong Liu
Fourth inventor's signature 2 Date 6-7-99
Residence Ballwin Missouri USA
Citizenship USA
Post Office Address 885 Castle Pines Drive, Ballwin Missouri 63021
Full name of fifth inventor
Fifth inventor's signature Date
Residence
Citizenship
Post Office Address
Full name of sixth inventor
Sixth inventor's signature Date
Residence
Citizenship
Post Office Address